

^{113, 114, 116, 113, 114}
heating the contaminated soil to vaporize contaminants by flowing hot gas through the at least one conduit;
¹⁰⁷
maintaining pressure within the at least one conduit ^{below a pressure in the soil to inhibit} ^{negative pressure} transport of the combustion gas from the at least one conduit to the soil; and
drawing vaporized contaminants into the at least one conduit from the contaminated soil.

12. (new) The method of claim 11, wherein a plurality of conduits are used, wherein portions of the conduits that have openings are oriented substantially horizontal to the ground surface, and wherein the plurality of conduits are laid out in a substantially parallel orientation with direction of flow in adjacent conduits in opposite directions.

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13. (new) The method of claim 11, wherein a plurality of conduits are used, wherein portions of the conduits that have openings are oriented substantially horizontal to the ground surface, and wherein the portions are placed between about one and about 10 feet into the soil relative to the ground surface.

14. (new) The method of claim 11, wherein the at least one conduit is placed within a trench, and wherein the trench ^{is} filled with soil produced during formation of the trench after the conduit is placed in the trench.

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see page 3.
not is spec new method

15. (new) The method of claim 11, wherein the at least one conduit is placed within a trench, and wherein the trench is filled ^{with uncontaminated fill material after} the conduit is placed in the trench.

clean fill

16. (new) The method of claim 11, wherein the at least one conduit is placed within a trench, wherein the trench is filled with ^{uncontaminated fill material after} the conduit is placed in the trench, and wherein the fill material has a greater permeability than soil removed from the trench.

clean fill

^(108, 110, 111)
17. (new) The method of claim 11, further comprising thermally degrading at least a portion of the vaporized contaminants.

18. (new) A method of in situ removal of volatile contaminants from contaminated soil, comprising:

heating a conduit positioned in soil by drawing a hot fluid through the conduit, wherein the conduit comprises openings adjacent to the soil, and wherein a pressure within the conduit is maintained below a pressure outside of the conduit to inhibit mass transfer from the conduit to the soil and to promote mass transfer of vaporized fluid from the soil into the conduit;

heating the contaminated soil by conduction from the conduit to vaporize contaminants;
and

drawing contaminants from the soil into the conduit.

19. (new) The method of claim 18, further comprising removing contaminants from gas that has passed through the conduit.

20. (new) The method of claim 18, wherein a section of the conduit having openings is positioned within the soil in a substantially horizontal orientation.

21. (new) The method of claim 18, wherein the conduit is positioned within the soil between a depth of from about 4 inches to about 10 feet.

22. (new) The method of claim 18, wherein a blower draws hot fluid through the conduit and draws contaminants from the soil into the conduit.

23. (new) The method of claim 18, wherein the hot fluid comprises combustion gas from a burner.

24. (new) The method of claim 18, wherein a portion of the conduit is placed within a trench within the soil, and wherein the trench is filled with soil produced during formation of the trench after the conduit is placed in the trench.

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25. (new) The method of claim 18, wherein a portion of the conduit is placed within a trench within the soil, and wherein the trench is filled with uncontaminated fill material after the conduit is placed in the trench.

clean soil ok

26. (new) A method to remove contaminant from a contaminated volume of soil, comprising:
passing hot gas through a first conduit that is positioned within soil, wherein a portion of the first conduit comprises openings positioned within the soil, wherein the hot combustion gas flows in a first direction through the first conduit, and wherein a pressure within the first conduit is maintained below a pressure within the soil to inhibit passage of gas from the first conduit into the soil and to promote passage of contaminant from the soil into the first conduit;

passing hot gas through a second conduit that is positioned within the soil, wherein a portion of the second conduit comprises openings positioned within the soil, wherein the portion of the second conduit is oriented adjacent and substantially parallel to the portion of the first conduit, wherein the hot combustion gas flows in a second direction through the second conduit, and wherein a pressure within the second conduit is maintained below a pressure within the soil to inhibit passage of gas from the second conduit into the soil and to promote passage of contaminant from the soil into the second conduit;

heating the soil at least in part by conduction from the first conduit and the second conduit; and

removing contaminants from the soil by drawing contaminants into the first conduit or into the second conduit.

27. (new) The method of claim 26, wherein the first direction is substantially opposite to the second direction.

28. (new) The method of claim 26, wherein the hot gas passed through the first conduit comprises combustion gas from a burner.